

ABSTRACT

A semiconductor device 1000 may include first and second switch elements 1000A and 1000B formed in first and second element forming regions 16a and 16b of a SOI layer 10a, respectively. The first and second switch elements 1000A and 1000B form a BiCMOS inverter circuit, and each includes a field effect transistor and a bi-polar transistor. A first p-type body region 50a is electrically connected to an n-type source region 120. The first p-type body region 50a is electrically connected to a first p-type base region 220. A second n-type body region 54a is electrically connected to a second n-type collector region 430. A p-type drain region 330 is electrically connected to a second p-type base region 420.